# Plagiocephaly: Prevention Begins at Birth

Doctors have found that placing babies on their backs to sleep helps prevent Sudden Infant Death Syndrome (SIDS). However, babies who lie in one position too long may develop an abnormal head shape called plagiocephaly (pley-jee-uh-sef-uh-lee).

#### What is Plagiocephaly?

• Plagiocephaly means slanting or flattening of one side of the head.

### What causes Plagiocephaly?

- An infant's skull is very soft to allow the brain to grow during the first year of life. If the head stays in the same position, a flat spot may develop.
- Plagiocephaly can be caused by lying in one position too long with the head turned to only one side. This can happen in babies who sleep on their backs or who spend a big part of the day in a baby car seat, bouncy seat, swing and/or stroller.
- The combination of sleeping on the back and pressure on the back of the baby's head can create a flat spot. Once the head changes begin, if the baby is not put in different positions, the flat spot may get worse.

A typical baby's head is more oval shaped – not like the head shape pictured here.

### What can happen?

- The entire head can change shape, even the face!
- Without treatment, changes in face shape can lead to an imbalance in the eyes and a change in jaw shape.
- If your baby's head still has a flat spot at age 3 months, a molding helmet may be needed to reshape the flat spot.
- Having plagiocephaly does not always mean your baby will have developmental delays. Babies with plagiocephaly often have tight neck muscles. Having tight muscles can cause delays because the baby cannot move properly.

# Plagiocephaly can be prevented

- Change your baby's position often when they are awake.
- Limit the amount of time your baby rests in positioning devices, like:
  - Car seats, bouncy seats, baby swings and strollers



Limit use of car seats and baby carriers when baby is awake.





## Plagiocephaly: Prevention Begins at Birth continued...

- It is very important to put your baby on their tummy when awake and being watched.
  This takes pressure off the back of your baby's head, so there is less chance of developing a flat spot.
- Being on their tummy while you are with them will strengthen the neck, arms, tummy and back muscles. With stronger muscles, your baby will be able to turn their head to both sides, which will help prevent always having pressure on the same side of the head.

### **Scheduling Information:**

- Children with plagiocephaly (abnormal head shape) should be referred to:
  - o Physical therapy right away at any age. Phone: (513) 636-4651
  - Cincinnati Children's Plastic Surgery for assessment of plagiocephaly and potential helmeting at age 3+ months. Phone: (513) 636-7181
  - Evidence supports starting helmeting between 4-6 months. Babies less than 4 months typically don't have enough head control to manage the weight of the helmet. There is still a chance to improve head shape without helmeting at that age.
- Helmet therapy is less effective in improving head shape once a baby is older than 9 months of age.

The American Academy of Pediatrics recommends that babies lie on their back to sleep and have frequent supervised tummy time when they are awake.

#### For more information

Cincinnati Children's Division of Occupational Therapy and Physical Therapy Phone: **(513) 636-4651** 



